REMARKS

Claims 1-22 are pending in the case. Claims 11-20 have been previously withdrawn from consideration; and claims 1, and 7-9 have been amended, claims 5-6 have been canceled and claims 21-22 have been added by way of the present amendment. Reconsideration is respectfully requested.

In the outstanding Office Action, Applicants election of Group 1, claims 1-10 was acknowledged; Applicant was reminded of the proper language and format for an Abstract; and claims 1-10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wheable et al. (U.S. Patent No. 4,592,665) in view of Jones (U.S. Patent No. 3,444,399). However, it is respectfully submitted that in view of the outstanding Office Action, the Examiner misstated the rejection and meant Wheable et al. in view of Kimura et al. (U.S. Patent No. 5,837,884). Clarification is requested.

ABSTRACT

In response to the Examiner's comments on the Abstract, the Abstract has been amended to remove the references to the phrase "the present invention discloses" and to make place the Abstract in a more narrative form. The amendment raises no question of new matter.

Claim Rejections - 35 U.S.C. §103

Claims 1-10 were rejected under 35 U.S.C. § 103(a) as being anticipated by Wheable et al. and Kimura et al. Applicants respectfully traverse.

Claim 1 has been amended to clarify the invention. In particular, claim 1 has been amended to incorporate the limitations of canceled claims 5 and 6, which recite:

> the resistor, the heater and the dielectric are at least partially disposed within a dielectric material, and
>
> *the thermal conductivity of the dielectric is higher than that of the dielectric material* (emphasis added).

In addition, new claims 21 and 22 have been added to further clarify the invention. Support for the amendments is provided at least at page 5, line 25-to- page 7, line 11; and is shown at least in

FIG. 4A to FIG. 4D of the specification. Therefore, the amendments raise no question of new matter.

Wheable et al. discloses a temperature controlled system for non-thermal parameter measurements.[1] In particular, Wheable et al. discloses an electronic device **10** comprising a four-arm active strain gauge bridge **12** consisting of resistors **14, 16, 18, 20**.[2] Further, Wheable et al. discloses a heating resistor **42** that is mounted on the non-active, outer peripheral area of a diaphragm **22** and is coupled as a controlled heater for the diaphragm **22**.[3]

In addition, Wheable et al. discloses that any change in the resistance of the resistors **14, 16, 18, 20**, due to a change in temperature, will change the potential difference across the strain gauge bridge **12** that is measured between the terminals **12a** and **12b**.[4] Further, Wheable et al. discloses this change is sensed by a potential divider comprised of resistors **44, 46** connected in series between the output of an amplifier **28** and the negative bus **30**.[5]

Further, Wheable et al. discloses that heating resistor **42** is connected in the emitter circuit of transistor **50** and a feedback resistor **54** is coupled between the emitter of transistor **50** and the negative input **48b** of amplifier **48**.[6] Furthermore, Wheable et al. discloses that this combination of devices forms a temperature control circuit for a substrate. Moreover, Wheable et al. discloses that the heat generated by the heating resistor **42** on the silicon diaphragm **22** maintains the strain gauge bridge **12** resistors substantially constant.[7]

However, Wheable et al. nowhere discloses, as recited in amended claim 1:

> the resistor, the heater and the dielectric are at least partially disposed within a dielectric material, and
>
> *the thermal conductivity of the dielectric is higher than that of the dielectric material* (emphasis added).

That is, Whaeble et al. nowhere discloses that "the thermal conductivity of the dielectric is higher than that of the dielectric material," as recited in claim 1. In fact, as noted in the outstanding Office Action, does not disclose " a dielectric disposed between the heater and the

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[1] Wheable et al. at ABSTRACT.
[2] *Id.* at column 3, lines 27-28.
[3] *Id.* at column 4, lines 12-15.
[4] *Id.* at column 4, lines 16 to 19.
[5] *Id.* at column 4, lines 19 to 22.
[6] *Id.* at column 4, lines 35-36.
[7] *Id.* at column 4, lines 36-39.

resistor," as recited in claim 1.[8] Moreover, a word search of Whaeble et al. suggest that the reference does not explicitly mention the limitations "dielectric" or "dielectric material," as recited in claim 1.

Thus, it is respectfully submitted that Wheable et al.does not disclose, suggest or make obvious the claimed invention.

In addition, the outstanding Office Action acknowledges other deficiencies in Wheable et al. and attempts to overcome these deficiencies with Kimura et al.[9] However, Kimura et al. cannot overcome the deficiences of Wheable et al., as discussed below.

Kimura et al. discloses a humidity sensor that enables a humideity measurement to be produced by a single temperature sensing resistor.[10] In particular, Kimura et al. discloses a humidity sensor chip **10** that comprises a thin film heat generator **2** formed on a SiO_2 film **7** and a thin film sensing resistor **1** formed on the SiO_2 film **7** and the heat generator **2**.[11]

However, Kimura et al. nowhere discloses, as recited in amended claim 1:

> the resistor, the heater and the dielectric are at least partially disposed within a dielectric material, and
>
> *the thermal conductivity of the dielectric is higher than that of the dielectric material* (emphasis added).

That is, Kimura et al. nowhere discloses that "the thermal conductivity of the dielectric is higher than that of the dielectric material," as recited in claim 1. In fact, a word search of Kimura et al. suggest that the reference does not explicitly mention the limitation "thermal conductivity," as recited in claim 1.

Further, neither Wheable et al. nor Kimura et al. disclose the limitations of new claims 21 and 22.

Therefore, it is respectfully submitted that neither Wheable et al. nor Kimura et al., whether taken alone or in combination, disclose, suggest or make obvious the claimed invention and that claim 1, and claims dependent thereon, patentably distinguish thereover.

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[8] Outstanding Office Action at page 3, paragraph 6, lines 10-13.
[9] Outstanding Office Action at page 3, paragraph 6, lines 10-13.
[10] Kimura et al. at ABSTRACT.
[11] *Id.* at column 7, lines 30-33.

Conclusion

In view of the above amendments and remarks, reconsideration and allowance of the pending claims are respectfully requested.

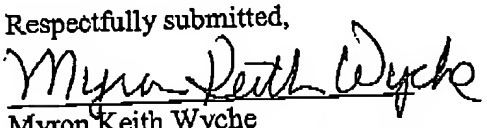
Applicants believe that the present application is in condition for allowance, and an early indication of the same is respectfully requested.

If the Examiner has any questions or requires clarification, the Examiner may contact the undersigned so that this Application may continue to be expeditiously advanced. In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned is available at the telephone number noted below.

The Director is hereby authorized to charge any fees, or credit any overpayment, associated with this communication, including any extension fees, to Deposit Account No. 22-0185.

Date: May 17, 2005

Respectfully submitted,



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